

Title (en)
PROPULSION SYSTEM FOR AN ELECTRICALLY DRIVEN AIRCRAFT, AIRCRAFT COMPRISING A PROPULSION SYSTEM AND METHOD OF SELECTIVELY ADAPTING AN ENERGY SUPPLY WITHIN A PROPULSION SYSTEM OF AN ELECTRICALLY DRIVEN AIRCRAFT

Title (de)
ANTRIEBSSYSTEM FÜR EIN ELEKTRISCH ANGETRIEBENES FLUGZEUG, FLUGZEUG MIT ANTRIEBSSYSTEM UND VERFAHREN ZUR SELEKTIVEN ANPASSUNG EINER ENERGIEVERSORGUNG IN EINEM ANTRIEBSSYSTEM EINES ELEKTRISCH ANGETRIEBENEN FLUGZEUGS

Title (fr)
SYSTÈME DE PROPULSION POUR UN AÉRONEF À PROPULSION ÉLECTRIQUE, AÉRONEF COMPRENANT UN SYSTÈME DE PROPULSION ET PROCÉDÉ D'ADAPTATION SÉLECTIVE D'UNE ALIMENTATION D' ÉNERGIE À UN SYSTÈME DE PROPULSION D'UN AÉRONEF À PROPULSION ÉLECTRIQUE

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Abstract (en)
The invention relates to a propulsion system (10) for an electrically driven aircraft (100). The propulsion system comprises a plurality of drive units (30a, 30b, 30c) and an energy management subsystem (11) for adapting an energy supply to the plurality of drive units (30a, 30b, 30c). The energy management subsystem (11) comprises a control unit (22), an energy storage unit (24) and a voltage converter (26). The voltage converter (26) is configured to adapt an output voltage of the energy storage unit (24) to a voltage level of a selected one of the plurality of drive units (30a, 30b, 30c) and the control unit (22) is configured to connect the energy storage unit (24) to the selected one of the plurality of drive units (30a, 30b, 30c), such that energy is supplied by the energy storage unit (24) to the selected one of the plurality of drive units (30a, 30b, 30c) or such that energy is withdrawn from the selected one of the plurality of drive units (30a, 30b, 30c). The invention also relates to an aircraft (100) comprising the propulsion system (10) and to a method of selectively adapting an energy supply within a propulsion system (10) of an electrically driven aircraft (100).

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Citation (applicant)
• EP 2720945 A1 20140423 - EADS DEUTSCHLAND GMBH [DE]
• US 2016137305 A1 20160519 - JOUBERT EMMANUEL [FR], et al

Citation (search report)
• [X] EP 3103670 A1 20161214 - ROLLS ROYCE CORP [US], et al
• [X] EP 3296212 A1 20180321 - ROLLS ROYCE PLC [GB]

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